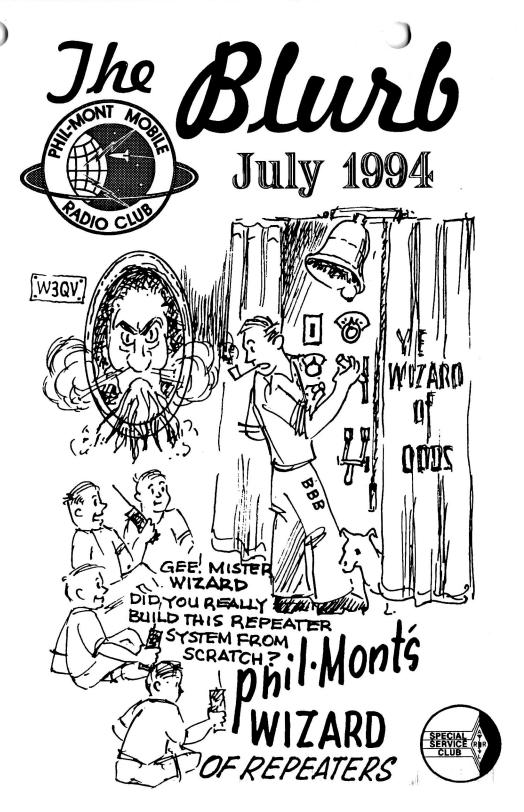


THE PHIL-MONT MOBILE RADIO CLUB, INC. A Publication of

P.O. Box 88, Abington, PA 19001



## **VOLUME 44**

is published monthly by, and for, the members of The PHIL-MONT MOBILE RADIO CLUB, INC. whose purpose is to promote Amateur Radio in general, and Mobile Radio in particular. Copying and quoting is permitted with a credit line. We gladly exchange publications with other amateur radio clubs; requests should be sent to the Editor. Alus subscriptions are available to nonmembers for \$10 addressed to the Treasurer. The club meets sometime after 7:30 p.m. on the first non-holiday WEDNESDAY of every month at The Franklin Institute Science Museum, Benjamin Franklin Parkway at 20th Street, Philadelphia. Enter from Winter Street, or the parking garage on 21st street.

ALL VISITORS ARE WELCOME!

Amateur Radio License Examinations - the first non-holiday Thursday of every month at The Franklin Institute Science Museum—doors close at 6:30 p.m.-SHARP!

#### **CLUB INFORMATION**

24-Hour Information Number at W3TKQ: (215) 448-1139

Repeater frequencies: 147.03 MHz (Roxboro input requires no PL, but outputs 91.5 Hz.)

PL required for off-site receiver (OSR) access:

Bucks County 131.8 Hz—Center City 103.5 Hz—Lansdale 114.8 Hz

444.80 MHz (186.2 Hz PL)

Simplex frequency: 147.51 MHz

Packet BBS frequency at W3TKQ: 144.99 MHz

Mailing Address: P.O. Box 88, Abington, PA 19001

#### **STATIONS**

W3QV - 147.03 MHz. Repeater - 8200 Ridge Avenue, Philadelphia, PA - Trustee W3BBB W3TKQ - The Franklin Institute Science Museum, Philadelphia, PA - Trustee W3PWG AMATEURS (with license) ARE ALWAYS WELCOME TO OPERATE W3TKQ.

#### **OFFICERS**

PRESIDENT: KB3IV, Ed Masarsky, 15 Poe Avenue, Wyncote, PA 19095 (215) 572-5238 1st VICE PRESIDENT: WU3I, Steve Hoch, 4638 Oakland Street, Philadelphia, PA 19124 (215) 535-8061 2nd VICE PRESIDENT: W3STW, Al Tribble, 2848 Carter Road, Trevose, PA 19053 (215) 639-6771 SECRETARY: KE3CZ, Bob Wilcox, P.O. Box 21914, Philadelphia, PA 19124 (215) 535-7355 TREASURER: N3KGG, Dave Witkowski, 730 Greymont Street, Philadelphia, PA 19116 (215) 969-5485

### **DIRECTORS**

W3BBB (94); N3FVI (94); AA3EP (95); W3IRS (95); W3IIM (A); K3KUD (A); W3RM (A)

#### COMMITTEES

| Archives:             | W3IIN    | Field Day     | N3IEI | Repeater:       | W3BBE        |
|-----------------------|----------|---------------|-------|-----------------|--------------|
| <b>Bluss</b> Folding: | WB3KOH&J | Membership:   | AA3BB | Special Events: | AA3EP        |
| Budget /Audit:        | K3KUD    | Net Control:  | KB3IV | VE Program:     | ND3Q         |
| Directory:            | WB3KOJ   | Program:      | WU3I  | TVI:            | W3VVS        |
| Education:            | AA3CH    | Publicity:    | N3IEI | W3TKQ:          | <b>KB3IV</b> |
| Emera, Coord.:        | W3BBB    | Refreshments: | N3FVI | Welcome:        | NEEDED       |

## Blurb STAFF

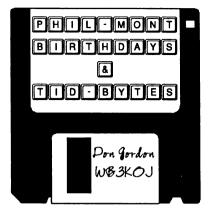
Editor: W3IIM, Jack Haring, 2113 Edgehill Drive, Furlong, PA 18925 (215) 794-7623 Publisher/Typist: W3IIN Artist: N3QIE Labels: WB3KOJ DEADLINE: To be assured of publication in the current month, all copy MUST be in the hands of the Editor at the Bored of Directors' Meeting!

# **NET SCHEDULE**

09:30 147.030 MHz FM "SUNDAY MORNING 2 METER NET" "10-on-10 NET" 10:00 28.993 MHz SSB 10:20 3.993 MHz SSB 75 METER NET TUESDAY 20:00 147.030 MHz FM CW PRACTICE NET (RESUMES IN SEPT) LAST WED 20:00 147.030 MHz FM W3TKQ OPERATORS' NET

### **JULY BIRTHDAYS**

- 02 Ted Katz N3OWM\* Alice Popovic (XYL N3FVI)
- 04 Marion Blum (XYL N3AXJ) Rheba Bock (XYL K3PHC) Don DiGiovanni - N3NJI John DiGiovanni - N3LUD Bob Palko - KE3GS\* Mike Wiacek - N3PDO\*
- 09 Wavne Lewis N3MUG Donna Rush (XYL WT3X)
- 10 Natalie Gordon WB3KOH
- 12 Grace Smith (XYL K3GBA)
- 14 Bill Clayton K3HIE Larry Clifford - W3UY Mary Ann Conshick (XYL WB3ERB\*)
- 17 Norma lacuppucci (XYL N3NNL) Donna Palko (XYL KE3GS\*)
- 20 Irv Miller K3KNH
- 23 Theresa Henderson (XYL KA3MHO)
- 24 Josh Feierman N3NLR Peggy Snyder (XYL W2SHA)
- 25 Jinny Haring W3IIN
- 26 Virginia Kleinguenther (XYL KA3SWU\*)
- 27 Jules Markowitz N3IZZ
- 31 Steve Hoch WU3I



#### **HELP PHIL-MONT**

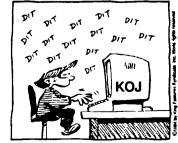
Are you planning to join ARRL or renew your current membership? Help P.M.R.C. by joining or renewing through the club, contact the Treasurer, Dave Witkowski, N3KGG for details.

#### **MEMBERSHIP STATS**

At press time P.M.R.C. has:

- 166 FULL PAID MEMBERS
- 17 FAMILY MEMBERS
- 3 HONORARY MEMBERS
- 5 PENDING MEMBERS

#### **FAST TRACK**







Intelligencer

<sup>\*</sup>Indicates New Member 1993-94

#### PENDING LEGISLATION

There's a bill before the senate finance committee called S.1825, THE TAX FAIRNESS FOR MAIN STREET BUSINESS ACT OF 1994.

In brief, the bill's author proposes that mail-order firms delivering into any tax jurisdiction in the United States be required to collect the appropriate sales tax, and then make a quarterly payment to the state for distribution.

Not only would the bill provide additional monies desperately needed by the states and towns, it would be good for the hometown retailers by eliminating the 5 to 9% pricing advantage the mail-order houses automatically enjoy by not charging sales tax.

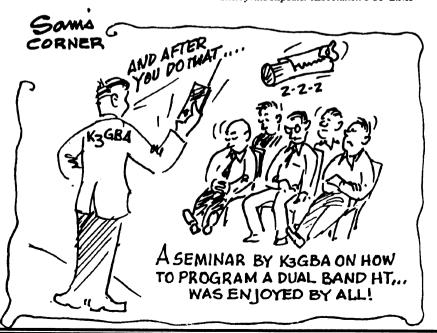
Your senator wants to hear what you think about it.  $\triangle$ 

#### WILDERNESS PROTOCOL

A special procedure has been established for persons in backcountry areas to call, and listen for emergency traffic. Anyone living, hiking or driving in or near wilderness areas, parks and forests, the Appalachian Trail, etc. should monitor 146.52 for five minutes at 10:00 a.m., 1:00 p.m. and 4:00 p.m. local time. This will allow hams in distress to call for help without wasting precious battery power by constant calling or listening.

While this was first instituted for large national parks out west, it should be maintained throughout the country. Hikers usually have low-power HTs, and are often in valleys where it is difficult or impossible to reach even a nearby repeater. In Colorado. a stranded ham was able to contact another hiker who was able to reach a high point and hit a repeater to relay the emergency traffic and get help.  $\triangle$ 

Cherryville Repeater Association's UP-LiNK



# The PREZ SEZ

Ed Masarsky, KB3IV



n Sunday, June 5, the "bikers" invaded Philadelphia (no Chuck, not that kind of biker). The 10th annual CoreStates, and the first Liberty Classic Bike Race came off without a hitch. The weather was perfect, as it has been for every race. Phil-Mont was there, along with hams from other groups, to offer their communication skills. Our job was to alert course marshals that the riders and support vehicles were approaching their locations. That way the spectators lining the course could be kept out of harm's way. We also passed any emergency traffic to net control, so that they could notify the proper services as to what was needed.

Special thanks to K2SVX, the Channel 6 repeater on 145.27, for again allowing us to use their system. It gave us complete HT coverage of the entire race course. This year's event was coordinated by Bill, N3FVI, who attended the meetings of the race coordinators and officials, and obtained all credentials and "T" shirts for the operation. He rode the entire 156 mile course on his new Red BMW motorcycle, equipped with dual band VHF and UHF radio. He had the best looking "bike" on the race course. Thanks to all who participated this year, and a very special thank you to our firsttime net control, Carl, WB0CPR. Great Job!

By the time you read this, we will have completed Field Day and Paddlerama. Each event's leader will report in the August **Blust** on how it all came off. Thank you in advance to all participants.

#### **VE TEST PROGRAM**

June was the 110th monthly test session given by the Phil-Mont team which is offering a tremendous service to the citizens of the Delaware Valley. The dedication of the team, led by Dusty, ND3Q, has brought many new hams into the hobby, and allowed current amateurs to upgrade their license class. You know that on the first Thursday of every month they will be there. I had a chance to talk to Dusty in person a few weeks ago, about how things were going with the program. He was pleased with his present list of volunteers, but expressed the need for some more help, since not everyone can make it every month. If you hold an Extra or Advanced class license, and want to become an accredited V.E., get in touch with Dusty. His phone numbers are in this and every issue of the Blurb. Dusty told me that he will be continuing as Chairman of the V.E. program, but would welcome additional support from Phil-Monters and non members. If you have a friend from another club who wishes to become a V.E., give him or her Dusty's phone number. I am working on obtaining some

Continued on page 21

# **UPCOMING**

JULY 6 General Meeting

A Double Feature!

Phil-Mont Does Dayton
(the original 1984 masterpiece)

ne original 1984 masterpi ~ and ~

the premier showing of the its sequel, **Phil-Mont Does Dayton II**—

The Next Generation

July 7 License Examinations at The Franklin Institute July 20 Directors' Meeting at

W3GQD's

AUG 3 General Meeting Program: Packet Demo: Around the World on 2-meters using 10 watts. Bob Wilcox, KE3CZ

Aug 4 License Examinations at The Franklin Institute Aug 17 Directors' Meeting at W3IIM&N's

**HAMFESTS** 

Aug 7 WARRINGTON, PA Mid-Atlantic ARC

Aug 14 EASTON, PA Delaware Lehigh ARC

Aug 28 MULLICA HILL, NJ Gloucester County ARC

Sept 11 GAITHERSBURG, MD Foundation for Amateur Radio

Sept 18 PENNSAUKEN, NJ South Jersey RA

Sep 24-25 YORK, PA

Oct 2 WARRINGTON, PA
Pack Rats

Oct 23 SELLERSVILLE, PA RF Hill ARC

## **V.E. TEST LOCATIONS**

Confirm all information, in advance, with the contact person. Licensed applicants must bring the original, and one photocopy of their license. All applicants, including children, must present positive ID. Also bring the original, and a copy, of any Certificate of Successful Completion needed to prove current status. The ARRL VEC's 1994 test fee is \$5.75; there is no charge for a Novice test.

#### • The FRANKLIN INSTITUTE

Monthly, 1st Thursday—Dusty Rhoads, ND3Q (215) 879-0505 day, (215) 482-0386 home

 BELLMAWR, NJ Monthly, 3rd Thursday—Bill Helmatag (609) 546-7710

• BRYN MAWR Irregularly—Bob Lees (215) 265-6032

• LEVITTOWN

Monthly, 1st Saturday—George LeNoir, WR3B (215) 943-4886

LINWOOD, PA-(Commercial & Amateur Exams.)
 Quarterly—Barb Levine, AA3DV
 (215) 859-9210, (302) 792-7760 home

• MORRISVILLE

Monthly, 3rd Thursday—Dave Munson, NM3K (215) 788-7515

• POTTSTOWN

Monthly, 1st Monday—Warren Erdman K3ZXQ (215) 679-5764

• TELFORD

Monthly, 3rd Monday—Warren Erdman K3ZXQ (215) 679-5764

UNIVERSITY OF PA

Monthly, Last Saturday—Garrett Klein, WZ3G (215) 898-8538 shack, (215) 222-8752 home

• WARMINSTER

Odd Months, Last Wed.—Tom Michaud, WA3TQJ (215) 343-3494

The Gettysburg Address (which is not printed on the new 610 forms)

Federal Communications Commission 1270 Fairfield Road Gettysburg, PA 17325

## **PUBLIC SERVICE EVENTS**

Charlie Weigand, AA3EP (215) 324-0167 Sept 17-18 M.S. 150 City-to-Shore Bike Tour really like change," she said, "anything new."

Carolyn said she plans to go to college to study veterinary medicine, but for next year her ambitions seem geared for the slopes. "I plan to ski as much as I can," she said. \( \exists \)

The Roxborough-Manayunk Review, via her proud papa, N3FVI

Call 1-800-32-NEW-HAM

for free information for prospective hams

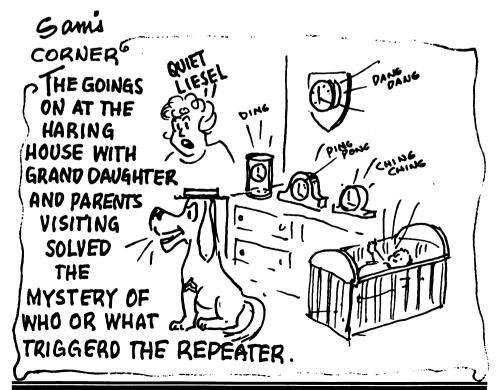
Continued from page 3

The Blurb

additional "perks" for members of the V.E. team. I hope to be able to let you know next month.

I want to remind everyone, coming to the July meeting, that it will take place in the classroom on the 5th floor. Choices Forum won't be available to us until after the summer. I can assure you that this location has a great air conditioner. We don't want you overheating your transistors and diodes. Looking forward to seeing you at the Premier of Phil-Mont Does Dayton II—The Next Generation.

P.S. Forget the tuxedos, limos, and groupies. ⊖



## Young Student Heading To Switzerland Studies

By JEANINE DONOVAN

ki-lover Carolyn Popovic [KA3VLJ] is taking her skis farther than cross country next year. The 15-year-old Central High School student is heading for the mountains of Switzerland.

Carolyn, daughter of Bill and Alice Popovic of the 300 block of Lemonte St., decided to make the most of her student exchange opportunity by asking for a spot near a ski resort. With over 30 countries to choose from, the sophomore is expected to land in Zurich, Switzerland July 25, for a year of foreign study.

Carolyn, who plays softball at the Al Pearlman Sports Complex, and has been horseback riding for over six years, will spend her junior year with a host family in Switzerland. Since she has studied German for the past two years at Central, Carolyn will be living in a German-speaking part of Switzerland.

The cost of the program has been met through her own efforts. "She's been fund-raising," her father said. "She ran a concession stand at a horse show." "I sent a bunch of letters out to local companies, telling them I was organizing a raffle to raise money for my trip, but I didn't get many responses," Carolyn said. She is planning to hold another sale at a horse show this month.

Carolyn said she learned about the program, YFU International, during a school assembly. Youth For Understand-

ing, based in Washington, D.C, was established in 1951 as a nonprofit educational organization dedicated to promoting international understanding and world peace through exchange programs for high school students. More than 2,000 American students enroll each year in the American Overseas summer semester and academic year programs. Carolyn is enrolled in the latter program, and said she was chosen based on her grades and a personal interview.

"I had a two-hour interview, and they asked me about my family, mainly to place me with a family I'd get along with," she said. "I travelled to Germany two or three times before, and have relatives there," she said. "I've also travelled to Austria. I wanted to see Switzerland. We had a choice of six months or a year in the program. I figured I'd do it for a whole year." Carolyn said she will attend the local school in the area where her host family lives, and will take the highest level of English they offer. "I requested a family who lived in the country with a child of my age," she said. "I don't like the city."

When asked what she thinks her experience will bring her, Carolyn said "I think I will change. I will be away from anybody I've ever known for a whole year. I'll have to be flexible and open to change," she said. "I'll welcome friends. The family will be a little strange at first, but I want to get close to them. I

# **MINUTES**

JUNE GENERAL MEETING Bob Wilcox, KE3CZ, Secretary



B3IV called the abbreviated General Meeting to order at 7:40 p.m. N3KGG, actually fully prepared with the treasury report, gave the full dollar and cent report. He also requested that any renewals or membership applications for the ARRL be processed through the club. He also asked that any donations for the W3TKO fund be sent to him.

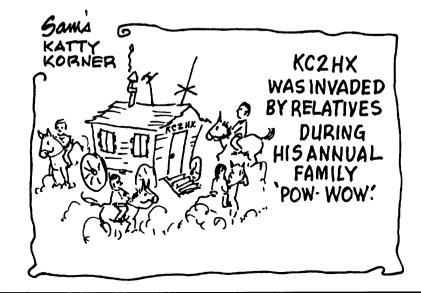
AA3BB for Membership: Bill had quite a few membership packets to be handed out, and as of this writing they should be in the hands of our newest members.

WU3I connected on both Field Day and Paddlerama, which will be taking place on the same weekend at the end of June. Hopefully a report on these two events will be forthcoming. KB3IV informed us of the passing of Frank, KB3CT. For those of you who knew Frank, you know we have lost a good friend and contact.

KB3IV asked for more volunteers for the station at W3TKQ. Thursday is one day that really needs someone to be in there.

Jon, KA3VVU, for welcoming: there were 24 members and 13 guests. Among the guests were Maureen McCloskey, Patti Katz, the Larkins— Jim, Donna and Amanda; Bill Uberb, Joyce Nelson, Mike Majero and a few others that I could not decipher from the signin sheet. Welcome to all.

The meeting was promptly adjourned and all went to the Fels Planetarium for the UFO presentation. A good time was had by all. And a nap was had by a particular few...



# **MINUTES**

### JUNE DIRECTORS' MEETING

Steve Hoch, WU3I, Acting Secretary

The meeting was called to order at 8:04 p.m. at the home of W3BBB. Attending were KB3IV, W3IIM, W3IIN, K3KUD, WB3KOJ (again), WU3I, N3KGG, N3DHI, AA3EP, W3GQD, K3GNM, W3RM, W3BBB and N3AXJ.

N3KGG reported on a healthy balance with expenditures just 4¢ in front of income. Comments were made about an early audit (and he just came back from vacation).

W3IIN reported on an averted catastrophe with the leaking of her hot water heater in the Archives storage room (basement). All was saved.

WB3KOJ reported all is well with the **Blurb** folding committee, and the supplement to the directory will be out in October.

W3BBB reported on no emergencies to coordinate, but the constant request of a budget to create one.

KB3IV reported on field day being ready to go. There was a meeting of the minds, and a visit to the site in Roxborough.

KB3IV reported on one new applicant to vote on—KA2FFP James Larkin. WU3I made the motion to accept, W3RM seconded. WELCOME JIM!!!

KB3IV reported on net controls, at which point W3BBB complained of having too much air time. Being told he was jeopardizing his Emergency Coordinator Budget he calmed down. All nets are doing well. There was a discussion on the poor attendance on the Volunteer Operators' Net.

WU3I reported on the upcoming programs July: Phil-Mont Does Dayton-The Original [narrated by our own lov-

1994

able curmudgeon, Donnie], and the premier showing of Phil-Mont Does Dayton II-The Next Generation.

August: Packet Around The World on 2 Meters with 10 Watts. Join KE3CZ for a real live packet demo, with real-time QSOs with DX stations on 2 meters.

Suggestions being accepted for September and October contact WU3I. November is being considered to roll together an Old Timers' Night and 45th Anniversary Banquet all in one. Comments are encouraged to your Officers and Directors.

W3BBB on the repeater: A two-channel voter will be installed in the next sixweeks to enable the repeater to pick the best signal between UHF and VHF. What this means is if you are using an off-site input, but you are better into the main site, it will automatically select your signal from VHF instead of the UHF signal fed from the offsite. There will be no change in the need for PL on the off-sites at this time. The board authorized an expenditure for the installation of a weather alert radio to be installed in the repeater.

AA3EP reported on the poor attendance of club members at the Arthritis Foundation Bike Tour. Three volunteered. The next event is the MS-150 to Ocean City, NJ in September. Thanks to all who were in on CoreStates. The race went off well for the 10th year in a row from the radio standpoint. Mother Nature cooperated with great weather, and a good time was had by all.

KB3IV reported that after a talk with ND3Q, that Dusty will be remaining on as

July

July

signal present "quieting," and it is a characteristic of FM radios. Keep on bringing up the signal level, and eventually the background hiss will almost totally disappear. We refer to this as "full quieting," and it takes about 5 to 20 microvolts of signal to get to that point on the average radio. The loudness of the tone from the signal generator will still be the same, but the noise around it will have essentially disappeared making it easy to hear.

Now, if you continue to increase the power out of the signal generator, you won't notice any change on what the receiver hears! Once you hit full quieting, that's as good as you can do. More signal level won't make you louder, and it won't make the noise get any quieter. You've hit the limit.

So, when you check your signal with someone, if you are full quieting (no hiss on your signal) then raising your power won't make any improvement-it will just cost you battery life on your HT, or unnecessary stress to your base or mobile rig. (Transistor lifetimes are long, but they are directly related to heat. Run 'em cool if you can.) If you are being heard clearly, but with low audio, bumping up the power won't help like it might on AM or SSB. It won't even be noticed. You'll have to talk louder, or change the microphone gain setting (adjustable with a pot in some rigs) to sound any louder. Don't adjust the deviation pot. That sets the limit, and if you make it wider, you won't get louder, you'll just disappear on voice peaks!

However if you have a hiss on your signal, and be sure it's on your signal, not the repeater's, then raising your power level could make the hiss decrease. That would improve your signal-to-noise ratio, and make it easier to copy you. A little hiss doesn't hurt, but when the hiss and your voice are nearly the same level, then a small boost in power, say from 1 to 5 watts, could drop that hiss substantially, and make things a lot more pleasant on the other end.

A couple of other quick points. Changing your power level should show a change in signal strength on the other station's receiver, but ONLY if you are operating simplex. If you are going through a repeater, the signal level their meter shows won't change, because the repeater hasn't changed its power output, and that is what they are looking at! 'Seems obvious, but I've heard more than a couple of people puzzling over why their S-meter doesn't move when they go from 5 to 45 watts while using the repeater. Now, if they checked on the input, things would be different.

Another point, when there is a hiss on a signal, check to see if it's on the repeater's output, or on the other station's input [to the repeater]. Listen to the other station for the hiss. If, when he un-keys his rig, this hiss goes away on the repeater's 'tail', and isn't present on the ID, then you are receiving the repeater full quieting, but the repeater isn't hearing your friend full quieting, and is passing some of its receiver's hiss into its transmitted signal, along with his voice. If he can raise his signal strength into the repeater, it should help remove that hiss. But, if you hear the hiss on both his transmission and the repeater tall, then you aren't hearing the repeater full quieting. Moving to a better spot, or improving your antenna situation is about all you can do to improve that. And remember, if you can't hear it well, it probably has a hard time hearing you-especially with an HT! The other possibility is that the hiss is present on the repeater tail but gets even worse when your friend transmits. In this case both problems are present, and the solutions are the same.

In any event, remember that for FM, power does not equal loudness. It only helps quieting, and once you hit full quieting, more power changes nothing. \( \text{\text{\text{\text{\text{\text{\text{\text{\text{\text{\text{otherwise}}}}}}} \)

Tompkins County ARC's 'The Hilltopper'

# I turned up the power, why aren't I louder?

Kevin Feeney, WB2EMS

here seems to be a misconception among some users of 2-meters FM on the effects of changing your power vs how well you are heard. I've heard a number of users lately changing their power levels in an attempt to raise their audio level to another station. Sorry gang, it's not going to work. FM doesn't behave the same way as AM or SSB as far as power changes go.

In AM or SSB (SSB is essentially a special form of AM), the audio signal is impressed on the RF waveform by changing the signal strength, and is proportional to the signal strength. To use the simple case, if you were 100-percent modulating a 100-watt transmitter, 66 watts of your output would be carrier, and 33 watts would be split between the upper and lower sideband, 16.5 watts each. Some fraction of that 16.5 watts would show up in your receiver's detector to be converted into audio. Now, if you ran that signal through a 1,000 watt amp, the power in each sideband would go up 10 times to 165 watts, and the same percentage would be available in your detector, for an increase in signal strength and loudness of the recovered audio of roughly 10 times.

But FM is different. In FM, the carrier power is constant, but the frequency moves about depending on the frequency of the voice and the loudness of the voice. (Strictly speaking, FM doesn't care about the frequency of the modulating signal, but we ramp up the audio 6db per octave to emulate phase modulation to help keep down the hiss—sort of a radio version of dolby.) The limiters and the detector in an FM receiver are supposed to make it immune to ampli-

tude changes, while responding to frequency changes. The wider the frequency swing, the louder the signal gets, until you run outside of the filters. Now play that back... the receiver is designed to ignore how strong or weak your signal is, but loudness depends only on frequency swing or deviation. Changing your HT from 1 watt to 5 watts won't change your deviation. (If it does, take the radio to the shop!) Same for a mobile going from 1 to 5 to 50 watts. No louder.

What the extra power can do is reduce the noise that is mixed-in with your signal. FM receivers run at very high gain, and they can because there is little atmospheric noise at 2 meters. The gain is so high that the quiet background hiss you hear on an HF rig with no signal becomes that familiar noisy roar of an unsquelched FM rig.

If you took a lab signal generator with a tone deviating the full 5kHz, and fed it into the receiver with the signal level turned all the way down, you wouldn't hear the tone in the roar—but it would be there. It would just be overpowered and mixed in with all the other random noise that the high gain of the receiver was amplifying. However if you slowly bring up the signal strength, the tone will not get any louder, but the roar of the background noise will begin to decrease. That's because the limiters and Automatic Gain Control (AGC) begin to reduce the gain of the receiver to accommodate the strong signal without overloading. The practical effect is to make the tone begin to appear to rise up out of the noise, but in fact the tone was always there. the noise is just receding. We call this reduction in the background noise with a

# 110<sup>TH</sup> MONTHLY VE SESSION STATISTICS .IUNE

20 candidates passed 21 elements 5 new amateurs plus 4 upgrades

VE team members: Dusty Rhoads, ND3O, Chairman

Russ Stafford, AA3CH; Barb Levine, AA3DV; George Starks, AA2FU; Arnold Cooper, AA3HO; Wally Newell, K3JJO; John Carbonaro, WA3TPH; Bob Freer, W3YLT

AMATEUR LICENSE EXAMS HELD ON THE FIRST NON-HOLIDAY THURSDAY OF EVERY MONTH Registration begins at 6:00 PM

Doors close at 6:30 PM sharp

# THE FRANKLIN INSTITUTE SCIENCE MUSEUM

For Information Call ND3Q at (215) 482-0386 or 879-0505 Accessible by the handicapped.



VE Leader, but needs help from some new faces. If you are a General class or above you can be of assistance. Please Contact ND3Q at the numbers in the front of the **Blurb**.

KB3IV for W3TKQ: the TS-450 is out for diagnosis and estimate. The Icom 2700 has been returned, as the intermod is very bad. The TS-2450 has been reinstalled. The club owns a TM-401B 70cm FM rig which will be installed for the time being. The schedule is still soft on Thursdays; volunteers needed. The gang attended the Volunteers' Brunch, and the food stories abound. (Volun-

teering just to go to this brunch is worth it!)

WU3I for W3TKQ: reported a plea was written for the SSTV and will be mailed soon. N3AXJ requested the purchase of the new world map by the ARRL in the June QST. The cost is minimal and the map will be ordered for the station.

K3KUD reminded the Board the new bylaws have to be clarified and printed to give to the club members.

WU3I made the motion to adjourn. N3KGG seconded. The meeting was adjourned at 10:16 p.m.

Thanks to Elaine and Jim for their hospitality.  $\triangle$ 

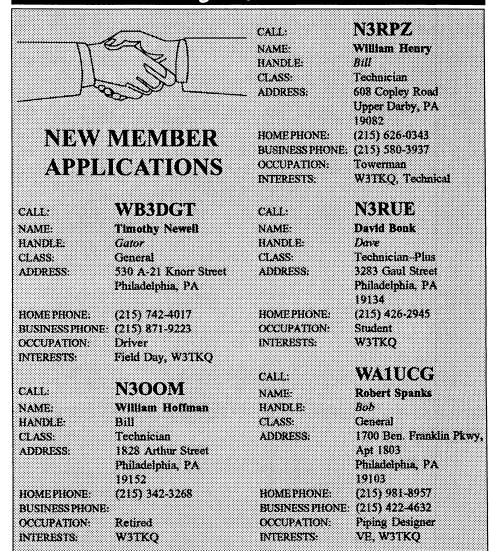
### **NEW GENERAL QUESTION POOL**

The General Class question pool changes for exams given on or after July 1, 1994.

1994



# Frank Cook KB3CT



## Have WE disappointed anyone lately?

Excerpt from a Florida newsletter:

"We missed the net on Sunday, but it was compensated for by a great visit with Al ... in Washington, DC. We met for breakfast (after I took a courageous ride solo on the Washington metro), and then spent the morning at the Smithsonian. The Ham station was closed, so we didn't get a chance to use it, but there was a great exhibit on computers and communications in general at the American Heritage building. We met a ham from Connecticut and another from Atlanta who were also anxious to use the equipment, but to no avail."

Editor's comment: Let's do all we can to avoid disappointing our fellow hams who've often travelled great distances to see, and operate our own demonstration station!



e recently tried an Icom-2700 dual band rig at the station, but the inter mod was still very bad. The group has determined that the problem is with the extended coverage radios. We will be trying a Kenwood TM-401B 70cm rig, and the Kenwood-2550 has been reinstalled. We still need a VGA color monitor for the SSTV setup. In my next column I hope to report on the donation of an SSTV board for the computer.

The Blurb

We need volunteers on Thursdays. Sal, NS3Y, has filled in very well, but we need some regular Thursday people. It's summer, and some of you are out of school and have some time on your hands. Stop down, and lend a hand.

I have some antenna projects planned for the summer. The 75m mars antenna is no longer necessary, and will be cut down from 4.055 to 3.990 for the Sunday morning net. The 40m dipole will be redone for 30m, and fill out for the only HF band for which we don't have an antenna. If you have any suggestions for YOUR station, let your committee people know. We would love to hear from you. Contact KB3IV, N3FVI or WU3I. A

—Stephen C Hoch, WU31

# W3TKQ Operators'

The last Wednesday of every month. Don't Miss It!

### Don't Blame Solar Flares!

Tor more than 60 years scientists have thought that solar flares occasionally affect the Earth's magnetic field, disrupting communications and threatening electrical power grids. Now these brightenings of the Sun's surface have been exonerated. At a December meeting of the American Geophysical Union in San Francisco, California, a different solar process, the coronal mass ejection, was fingered as the cause of earthly magnetic storms.

"Flares are spectacular solar events, and sometimes occur in connection with geomagnetic storms, so it's not surprising that the flare myth arose," said Jack Gosling (Los Alamos National Laboratory). Coronal mass ejections originate much higher in the Sun's atmosphere and, because they are faint, are much harder to observe. Large ones are sometimes followed by flares, but the two are "distinctly different phenomena," said Art Hundhausen (National Center for Atmospheric Research), who has studied ejections with the Japanese Yohkoh satellite and the Mauna Loa Observatory in Hawaii.

Driven by changes in the Sun's magnetic field, coronal mass ejections spew billion-ton blobs of gas into space (S&T: January 1990, page 10). Traveling up to 2.000 kilometers per second, the gas joins the flowing plasma of energetic particles known as the solar wind. About one-third of all coronal mass ejections move faster than the solar wind, driving a shock wave ahead of them through interplanetary space. The shock's arrival at Earth, followed by that of the gas itself, is what triggers a magnetic storm.

Earth intercepts about 70 coronal mass ejections per year when solar activity is at its peak, but fewer than 10 at solar minimum. During the last maximum period, all but one of the 37 largest geomagnetic storms were found to be associated with shock waves driven by these ejections. Summarizing his studies in a recent Journal of Geophysical Research, Gosling wrote, "It's time to lay the solar flare myth to rest." \( \text{\text{\$\text{\$\dagger}}} \) Sky & Telescope via W3UI

#### **NEWSLETTERS EXCHANGED**

Anne Arundel Radio Club (Maryland) Baltimore Radio Amateur Television Society (BRATS) Chaverim of Delaware Valley Cherryville Repeater Association (NJ) Delaware-Lehigh Amateur Radio Club (DLARC) Delmont Radio Club Fort Myers Amateur Radio Club (Florida) Mid-Atlantic Amateur Radio Club (MARC) Penn Wireless Association R F Hill Amateur Radio Club Reading Radio Club

Sanibel Amateur Radio Emergency Unit (Florida) Sussex Amateur Radio Ass'n (SARA) (Delaware) The 96 Over The Hill Gang (New Castle, Delaware) Tompkins County Amateur Radio Club (New York)

Warminster Amateur Radio Club

Worldradio Magazine

July

Exchanges with additional parties are welcomed.

## Pennsylvania State Police

Telephone numbers for emergency use by fixed stations in response to a mobile emergency.

| LOCATION        | (215)    | COUNTY              |
|-----------------|----------|---------------------|
| Bethlehem       |          | Northampton         |
| Dublin          | 249-9191 | Bucks               |
| Franklin Center | 459-4150 | Delaware            |
| Limerick        | 495-7055 | Montgomery          |
| Philadelphia    | 581-3144 | Philadelphia        |
| Plymouth Mtg    | 828-5230 | Montg (Pa Turnpike) |
| Trevose         | 757-6921 | Bucks (Pa Turnpike) |

PA Trucker's Guide via K3KUD

# A Model for Change in the Amateur Radio Licensing Procedure

Part 1 of 2

Winston Sweeney, VE3WFS

The development of advanced tech nology has all but spelled the end of the Amateur experimenter. Few of

today's hams either repair or build their

solid-state equipment.

Yesterday's ham was respected for his skill as a technician and an operator. Today, we pride ourselves on how well we operate our equipment, how well we organize our stations, and how well we construct our antennas.

The value we place upon operational skills is reflected in our anxieties. Our greatest anxiety is the threat of ham radio being invaded by the perpetrators of CB babble. To protect itself, Amateur radio has traditionally placed the entry bar high enough so that only the most skilled could survive the jump.

When its survival as a hobby was threatened by reduced numbers, the entry bar was lowered. The sudden explosion of new callsigns brought the fear that Amateur radio was becoming endangered by a channel-10 mentality. [Apparently a Canadian reference.-ed]

All is not well in VE Land. Letters to the editors of Amateur radio journals reflect this anxiety. It is widely discussed on the air. There is a widespread concern that new hams are bringing with them CB mindsets, poor operating skills, and a lack of protocol.

The nub of the frustration is that the increased numbers are not evident on the HF bands. This is a sore point for many, since the purpose for relaxed standards was to protect *these* bands. Was the experiment in vain?

1994

The vast legion of newcomers has opted for packet over HF, rather than face the challenge of the key. Worse still, is the thought that they might find packet a more exciting alternative to HF, and that the CW barrier has nothing to do with their decision not to cross over.

This is an 'instant gratification' society. A year of dedicated effort to learn the key seems like a lifetime, and the reward for many doesn't merit the effort.

And so, our young hams wander off into a world of nodes and bulletin boards. With a quick stab of a finger, a video world opens a labyrinth of keyboard communication. With another jab, a repeater becomes an international bulletin board, and the entire world opens up. This is a Nintendonurtured culture which has inherited video games, the joystick and the keyboard. Stab; jab... instant results.

The loss of Amateur experimentation has left a spiritual vacuum among many older hams. There is a sense that something of value is gone, and that the hobby has somehow been trivialized.

When the longtime ham looks at today's new Amateur, he cannot help but think of his own early days in Amateur radio. Because today's new hams are not experimenters, their communication bears little resemblance to the communication of old. There is little or no 'technical talk'. The Amateur who 'reads the mail' on the young Amateurs on our local repeaters hears conversations which lack radio experience. Their conversation seems trite and superficial, and for many advanced men of the hobby, it seems unworthy of repeater time.

# **GOODIES**

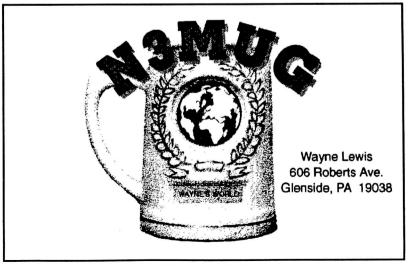
Yaesu FT-209RH 2-meter hand held transceiver
Yaesu NC-15 quick charger DC adapter ...... complete package—asking \$250
—Contact Bob Field, WA3INW, (215) 782-1763

| 1. He | eathkit HW-101,SB (bands 80,40,20,15,10) with power supply.    |       |
|-------|--|-------|
| ex    | cellent condition.   | \$110 |
| 2. He | eathkit HW-202 with power supply and microphone                | 75    |
| 3. Cl | legg FM-DX, 2mtr., 35 watt transceiver, with microphone        | 75    |
| 4. Ic | om IC-25A, 2mtr., 25 watt transceiver, with microphone.        | 125   |
| 5. N  | PC 13.6 volt, 12 amp. DC regulated power supply                | 30    |
| 6. A  | Imotronics 13.8 volt, 3 amp. regulated DC power supply         | 15    |
| 7. H  | eathkit HA-14, 1 KW, mobile/home linear with home power supply |       |
| (b    | pands 80,40,20,15,10 meters)                                   | 150   |
| 8. Ic | om IC-255 AM 2mtr., 25 watt transmitter, with microphone       | 100   |
| —Со   | ontact Al Bubeck, K3GNM, (215) 723-6783                        |       |

Wanted: Someone driving to Eastern Massachusetts who would take a Drake T-4X and AC-3 power supply to my son who lives 20 miles SW of Boston.

**FREE!** Short, half-wave, capacitance loaded vertical for 20-15-10 meters. Made by Mini-Products, Erie, PA in 1980, and never used. Instruction sheet missing. I would like to give this to someone who can use it, provided it is for a school station or a new ham. Will also welcome info leading to copy of instruction sheet.

-Contact Henry Platt, W3UI, (215) 564-4666



Wayne's World

The Blurb

hobby. And, not all senior hams throw carriers, and muscle their appointed skeds around someone who strays onto their "appointed 7 o'clock frequency."

While respect may be measured in many ways, the most evident is by the protocol or language of the hobby. And by protocol I don't mean order or procedure, as hams use the word (your callsign, my callsign). I mean the simple, basic respect that hams have for one another—a respect which is reflected by their choice of language and courtesy.

There are many who believe that there is an overall decline in social morals, courtesy and respect. If this is the case, a crossover is inevitable, in which case rude people in life become rude hams. People who are respectable and freindly become respectable, friendly hams. It's as simple as that.

Is malicious carping and interference a symptom of social indifference and disrespect? The degree of malicious carping, and repeater jamming, on certain repeaters in and around Toronto, seems like the first squirts of water, from an 11 metre ocean, penetrating through a hole in a dike.

I think the time has come for us to become proactive. I think it's time for the Amateur community to assume greater responsibility for the shape of things to come. Next month: THE MENTOR MODEL The Canadian Amateur Radio Magazine via RF Hill's newsletter MHz Times.

### IT'S NOT CLOSED YET!

A PNSY status report by Sam Kuncevich, N3QIE

The supreme court turned thumbs down on the navy yard's behalf; which of course was expected. They would not dare go against the President and Defense Dept. However Senator Spector has not given up the fight, and those retirees have not given up. In spite of the end result, the gates to the yard will not close.

The only propeller facility in the navy is here in the yard, so they will continue to function, as will the support groups. The foundry and pattern makers, the rigging shop (though reduced) the fire and police dept. (reduced), the public works group, also reduced. The reserve fleet "Moth Ball" group, mostly navy personnel will also remain. 4th Naval district navy and marine corps headquarters will be reduced but still function. Last but not least those who operate and support the navy's 2 biggest dry docks will also remain. There may be well over 1,000 still employed, if and when the vard "closes."

There will be 2 other groups not related to the shipyard who will also remain. The planning, estimating of repairs and alterations (PERA), and those of the navy boiler and propulsion test group, the only east coast facility of its type. The yard actually will be in a "stand by" condition while still functioning in a reduced manner.

"DON'T TAILGATE... WAIT"—for the courtesy \(\text{\tiny{\tint{\text{\tiny{\tint{\text{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\tiny{\text{\text{\text{\text{\text{\text{\text{\text{\text{\ti}\text{\texi{\text{\texi}\text{\text{\text{\texit{\texi}\titt{\texititt{\texit{\texi{\texi{\texi{\texi{\texi\tinit}\tint{\tiin\tiny{\texit{\texi{\texi{\texi{\texi}\tint{\texit{\texi{\texi

For hams who have been off the air for a number of years, and who have recently returned, the difference is shocking. Their immediate response is to compare it to CB. But, nontechnical communication, and personalized acronyms for callsigns are not exclusive to entry-level hams.

But there is more than that. The average new ham enters the hobby today in steps. The first step is the codeless basic entrance, which gives immediate access to two metres. The beginner becomes the inheritor of a repeater which was the result of much study, considerable effort and a lot of sacrifice from older hams. Because these new hams are green, and not as technically knowledgeable as their predecessors, their conversation seems not only lightweight,

but almost disrespectful, and a violation of the legacy.

Not only that, but when high school boys ragchew on the local repeater, and discuss their day at school, it seems more than a little like telephone talk.

Is it any wonder that from time to time, older hams lose their patience and end up lecturing, or even shutting down repeaters? The young ham is left confused. Is this any way to be welcomed into a new hobby? Besides that, even though they may understand the words of the lecture, could they ever possibly understand the underlying frustrations of the older ham? Likely not.

Also, it is easy for all hams to stereotype. Many new hams come into Amateur radio with a sense of reverence for the



| 1994   |                  |  | UIL  | Y  |                | 1994     |
|--|------------------|--|--|--|----------------|----------|
| SUNDAY   | MONDAY           | TUESDAY                                | WEDNESDAY  | THURSDAY   | FRIDAY         | SATURDAY |
| M NCS KB3IV<br>10M NCS W3HFY<br>75M NCS W3PWG                          | Independence Day | CODE PRACTICE NET Resumes in September | GENERAL MEETING<br>at<br>The Franklin Institute<br>Refreshments at 7.00 p.m<br>Meeting starts after 7:30 | Registration begins at 6:00  | 8 <b>(a)</b> 1 | 9 2      |
| 10<br>2M NCS N3FTY<br>10M NCS W3HFY<br>75M NCS AA3CH<br>BRATS' Hamfest | 11               | 12                                     | 13   | 14   | 15             | 16       |
| 17<br>2M NCS W3GQD<br>10M NCS W3HFY<br>75M NCS AA2FU                   | 18               | 19                                     | DIRECTORS' MEETING at W3GQD's  | 21   | 22 0           | 23       |
| 24<br>2M NCS NS3Y<br>10M NCS W3HFY<br>75M NCS KB3IV                    | 25               | 26                                     | OPERATORS' NET at 8 PM   | 28   | 29             | 30       |
| 31  2M NCS 1433333  10M NCS W3HFY 75M NCS 1433333                      |                  |  |  | Conscience is the inner voice that warns us that someone may be looking,  H.L. Mencken |                | RADIO CO |

the spirit of